THE CITY OF SAN DIEGO

# REPORT TO THE CITY COUNCIL

DATE ISSUED: November 18, 2010 REPORT NO: 10-159

ATTENTION: Council President and City Council Members

SUBJECT: Information Technology Sourcing Strategy; Authorizing Contract Options to Develop & Issue Request for Proposals and Vendor Selection Assistance for Information Technology Services

REFERENCE: RFP #10008187-10-A and Contract #4600000329

REQUESTED ACTION:

1. Accept the Information Technology Sourcing Strategy report developed by the Department of Information Technology on behalf of the Mayor's Office, with the assistance of Avasant LLC.

2. Authorize the Mayor or his designee to execute the City's option for Phase 2 (Development of one or more Requests for Proposals for IT Services) in the contract with Avasant LLC, for a total amount not to exceed $150,000.00, and authorize the Chief Financial Officer to expend $150,000.00 from the Information Technology Fund (200308) within the Department of Information Technology (1314) Fiscal Year 2011 Operating Budget, for the execution of Phase 2 with Avasant LLC contingent upon the City Comptroller furnishing one or more certificates certifying that funds necessary for expenditure under the established contract funding phases are, or will be, on deposit with the City Treasurer.

3. Authorize the Mayor or his designee to execute the City's option for Phase 3 (Sourcing Vendor Selection and Transition Management), in the contract with Avasant LLC, for a total amount not to exceed $242,000.00, and authorize the Chief Financial Officer to expend$242,000.00 from the Information Technology Fund (200308) within the Department of Information Technology (1314), for the execution of Phase 3 with Avasant LLC contingent upon the City Comptroller furnishing one or more certificates certifying that funds necessary for expenditure under the established contract funding phases are, or will be, on deposit with the City Treasurer.

STAFF RECOMMENDATION:

Approve the requested actions.

SUMMARY:

On April 12, 2010, the City Council, upon approving the contract for Help Desk and Desktop Support Services with En Pointe Technologies, Inc., requested that the Mayor bring back a strategy for sourcing of Information Technology (IT) services prior to the release of any additional Requests for Proposals (RFPs) for IT services. Subsequently, under the Mayor's direction, the Department of Information Technology issued a Request for Proposal (#10008187-10-A) in June 2010 for IT Sourcing Advisory Assistance to hire a consultant for the purpose of assisting the City with the development of an IT Sourcing Strategy (Phase 1 of the RFP scope). The RFP contained two optional phases which the City may exercise: Phase 2 for the development of one or more Requests for Proposals for the IT services outlined in the IT Sourcing Strategy, and Phase 3 for assistance with the evaluation of proposals received, selection of an IT services provider or providers, and transition management guidance. The proposal evaluation team consisted of Alan Watkins (IT Operations & Security Manager, Department of Information Technology), Wally Hill (Assistant Chief Operating Officer), Mary Lewis (Chief Financial Officer), and Irwin Pfister (outside business executive with IT sourcing background). The City received nine proposals, and after an evaluation of the proposals based on the criteria in the RFP, the City invited the top four firms for interviews and presentations as the second part of the selection process. Two of the four finalist firms were asked for their "Best and Final Offers," and, after evaluating the Best and Final Offers, the City awarded the IT Sourcing Advisory Assistance Contract (#4600000329) to Avasant LLC (Avasant) on September 10, 2010. The contract amount for Phase 1 was $231,000.00, and was executed under the Mayor's authority.

At the start of this project to develop the IT Sourcing Strategy, the Mayor's Office realized the need to make the planned RFP process as fair and open as possible, especially with regards to the current relationship between the City and the San Diego Data Processing Corporation (SDDPC). It is the City's intent to neither unfairly advantage nor disadvantage SDDPC or any other firm as a potential proposer to the future RFPs. As such, to prevent a potential conflict of interest and because of their dual roles as both city management and as voting members of the SDDPC Board of Directors, Naresh Lachmandas (Information Technology Director), Ken Whitfield (City Comptroller), and Alex Ruiz (Executive Assistant Public Utilities Director) were excluded from the working details of the IT Sourcing Strategy project. These managers may have participated in providing relevant information to the project team in regards to their respective department's business operations requirements, and they received general project status updates; however, they have not been involved with or privy to any of the details of information either gathered by or produced from the project team. They will be similarly excluded in Phase 2 and Phase 3 during the RFP and vendor or provider selection processes.

The City's primary business driver for the IT Sourcing Strategy and RFPs for IT services is cost reductions. Additional objectives include elimination of obsolete technologies (e.g., 1990s analog PBX phone systems) and the use of industry standards for IT services where they would be cost neutral. There was no direct goal to increase service levels or performance metrics; however, these may be natural results of using the service model

defined in the IT Sourcing Strategy. The primary IT services being addressed in the IT Sourcing Strategy are those currently provided by SDDPC and other outside contractors, either through SDDPC or direct City contracts. These include the service towers of "Data Center," "Data & Voice Network," and "Application Development & Maintenance."

The IT Sourcing Strategy Project Team consisted of Alan Watkins as the Project Manager and Wally Hill as the Project Sponsor, along with the Avasant consultants. The project Executive Steering Committee was comprised of Jay Goldstone, Mary Lewis, and Irwin Pfister. During September and October, IT Sourcing Strategy Project team met with key IT staff and management from several departments and collected both quantitative technical data (i.e., hardware and software assets) and qualitative data (i.e., performance levels to meet business operational requirements). The project team also visited the Public Utilities Department, Police Department, Fire-Rescue Department, and Environmental Services Department, where there are "data center" types of facilities (or "server rooms") within those departments' buildings. In addition, the project team met with Laura Atkinson and David Taylor, representing management from SDDPC, and toured SDDPC's data center facility. Late in October, the project team also met with Larry Morgan, the new Executive Director of SDDPC. Concurrently, the project team was collecting and analyzing the IT cost data from the Fiscal Year 2010 actual expenses and Fiscal Year 2011 final budget. Avasant also reviewed the prior IT Business Process Reengineering (BPR) studies from 2007.

During the data collection and analysis, the project team validated that some IT roles and responsibilities are performed by City IT staff, which is normal in almost all organizations, and Avasant identified some roles which should always be retained and performed by the customer organization and not delegated to an outside service provider. In addition, the project team found that SDDPC performs some of the functions that should be retained by the City, due to the lack of City IT staff resources or skill sets.

As outlined in the attached IT Sourcing Strategy Final Report developed by Avasant, the project team documented and analyzed the City's current IT environment, including assets and services, and the associated costs for Fiscal Year 2010 and Fiscal Year 2011. Due to the abnormally high IT costs during Fiscal Year 2010 for the OneSD ERP capital project and the start-up of the OneSD ERP Support Department, plus the fact that SDDPC had reduced its rates for Fiscal Year 2011, the financial analysis portion of the IT Sourcing Strategy uses the current, Fiscal Year 2011 amounts. In the Fiscal Year 2011 IT costs, the current CIP project costs (approximately $10.8 million) for the Public Utilities Customer Care System (CCS) being implemented in SAP was just footnoted and not included in the annual, ongoing IT costs.

In reviewing the current Service Level Agreement (SLA) between the City and SDDPC, Avasant compared those performance measures with industry standards offered by IT managed service providers. While the resulting chart in the IT Sourcing Strategy shows that SDDPC has no contractual SLA measures for many services, it was noted that SDDPC has been performing many, if not all, of the services. The project team did not

attempt to quantify or analyze the SDDPC services in relation to the industry standards, other than to assess risks and estimate potential cost savings, associated with various sourcing models.

Avasant provided the City with recommended governance structure, roles, and processes that will be needed to properly manage IT service providers under the new model of managed services. They noted that a common reason for the failure of IT sourcing efforts is the lack of proper internal governance by the customer organization which is contracting out the services. In addition to the governance requirements, Avasant provided information about operational staffing necessary to support ongoing IT service management. The Chief Operating Officer will be working with the Information Technology Director in identifying the proper levels of staff and other resources that might be needed.

The final area of the IT Sourcing Strategy involves the recommended sourcing option. As part of their analysis, using industry standards and Avasant's corporate experience with numerous other clients (both public and private sectors), they compared several potential options. Each option had an associated risk analysis and financial model which provided outcome scores to rank the options. The four final sourcing options include (1) the "base case" by continuing services as-is with SDDPC, (2) negotiating exclusively with SDDPC for an improved service model and cost structure, (3) "insourcing" all IT services with City staff, and (4) contracting for managed IT services. For option #3, Avasant only performed a risk analysis, as they did not consider it viable for the City of San Diego. The risk analysis for each of the options rated each of seven risk factors on a scale of 1 (low risk) to 5 (high risk), with financial risk having a weighting of 4x and technology risk having a weighting of 2x. The total weighted risk scores showed that the managed IT services option offers the least risk to the City.

The financial models used for options #1, #2, and #4 (divided into two service delivery models) all included a 2% inflation factor. The analysis used the current Fiscal Year 2011 budget of approximately $37.2 million for direct costs with SDDPC as the baseline, and forecasts the 7-year costs from Fiscal Year 2012 (transition year) through Fiscal Year 2019. The cumulative cost for option #1 (as-is base case) is approximately $314.4 million, while the cost for option #2 (renegotiating with SDDPC) is approximately $290.6 million. It must be noted that this cost was not obtained from SDDPC; it represents Avasant's professional estimate based on assumptions of SDDPC restructuring its current service and cost models to more closely align with current IT industry service models. Avasant and the project team fully expect SDDPC to provide their own service model and related costs in response to the planned RFP(s) which will be different than Avasant's projection. Option #4 (managed IT services) was divided into two resource delivery location options, first being all onshore and the second being mixed onshore and offshore. The cumulative cost for the onshore model, staying within the San Diego region, is approximately $269.2 million, and the cost for the mixed onshore and offshore model is approximately $244.5 million. Anticipated costs to be received from proposers are expected to be in the range between the onshore and mixed model costs.

The Mayor has adopted the IT Sourcing Strategy to use the managed IT service model and proceed with a single, modular RFP for IT services. The RFP will allow service providers to submit proposals that cover one, two or all three of the service categories, using their best resource location options (including onshore and offshore), and also to require proposals that are based on all onshore resources. Issuing the RFP for IT services provided by SDDPC is consistent with the City Council's Ordinance O-2011-16, which included it as part of the sales tax reform package.

FISCAL CONSIDERATIONS:

The "Best and Final Offer" from Avasant is $150,000.00 for Phase 2, and $242,000.00 for Phase 3, for a total cost of not to exceed $392,000.00 requested in this action. Phase 1 of the contract ($231,000.00) was budgeted and paid out of the adopted Department of Information Technology Operating Budget for Fiscal Year 2011. The overall contract value will be $623,000.00 for all three phases. Phase 2 and Phase 3 will also be paid out of the Fiscal Year 2011 Operating Budget, from the Information Technology Fund (200308), contingent on the Comptroller's certification of funds.

PREVIOUS COUNCIL and/or COMMITTEE ACTION:

City Council Ordinance O-2011-16 called for the issuance of an RFP for IT services provided by SDDPC as part of the sales tax reform package.

COMMUNITY PARTICIPATION AND PUBLIC OUTREACH EFFORTS:

None.

KEY STAKEHOLDERS AND PROJECTED IMPACTS:

All City departments will be potentially impacted by the anticipated changes in how the City receives its IT services. Citywide cost savings and improvements in service delivery are expected, after a reasonable transition and migration period.

ATTACHMENTS:

City of San Diego IT Sourcing Strategy Final Report, from Avasant, dated November 10, 2010.

Alan B. Watkins
IT Operations & Security Manager
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Assistant Chief Operating Officer

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November 10, 2010

Mr. Alan Watkins
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San Diego, CA 92101
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RE: City of San Diego IT Sourcing Strategy

Dear Mr. Watkins:

Attached is the Phase 1 IT Sourcing Strategy deliverable created under our agreement with the City of San Diego to provide Professional Sourcing Services Information Technology Sourcing Strategy Advisory Assistance.

We began our analysis of the City of San Diego IT and sourcing environment in early September and analyzed San Diego's IT requirements and budget through dozens of interviews and work sessions. Working with your team, we have used the gathered information to analyze IT sourcing scenarios that will provide the San Diego with cost savings while maintaining service quality and managing risk. Our conclusions are summarized in the attached document in the following sections.

- Information and Data Gathering
- Sourcing Drivers
- Process Analysis and Governance
- Sourcing Scenarios
- Financial Analysis
- Conclusion & Sourcing Action Plan

We look forward to supporting the City of San Diego in the implementation of the Sourcing Strategy in Phases 2 and 3.

Sincerely,

Mr. Kevin S. Parikh, Esq.
Chief Executive Officer & Sr. Partner

Enclosure: City of San Diego IT Sourcing Strategy Final Report



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# City of San Diego – Final IT Sourcing Strategy Report

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November 10, 2010

# Contents

- **Sourcing Approach and Methodology**
- **Information and Data Gathering**
- **Sourcing Drivers**
- **Process Analysis and Governance**
- **Sourcing Scenarios**
- **Financial Analysis**
- **Conclusion & Sourcing Action Plan**

# Phase 1 Scope and Methodology

The diagram below shows the scope and methodology Avasant has used for the Sourcing Strategy phase of its engagement with the City:


- The Sourcing Strategy Development phase is an iterative process that involves "deep dive" analyses of the City's current IT environment, including utilized resources and associated costs
- The ultimate goal of the Sourcing Strategy phase is to recommend a specific sourcing strategy to the City, which aligns with the City's business and IT goals and objectives

# City of San Diego – Important Dates / Milestones

| Major Milestone | Targeted Dates |
|---|---|
| Planning Meeting | 8/27/2010 |
| Primary Interviews, Data Collection, Site Visits | 9/7/2010 – 10/8/2010 |
| Sourcing Strategy Worksessions | 10/6/2010, 10/12/2010, 10/14/2010 |
| Executive Steering Committee Meeting | 10/15/2010 |
| First Draft of Sourcing Strategy Review | 10/25/2010 |
| Executive Steering Committee & Policy Group | 10/26/2010 |
| Executive Steering Committee & Policy Group | 11/5/2010 |
| Brief City of SD Mayor | 11/8/2010 |
| Sourcing Strategy Finalization | 11/9/2010 |
| Brief Rules Committee | 11/17/2010 |
| Full City Council Meeting | 11/29/2010 |
| Finalize Phase 2 Scope Refinement / Contract | 12/8/2010 – 12/14/2010 |
| Collect Additional RFP Requirements | 12/13/2010 – 12/31/2010 |
| RFP Bid Package Review Work Sessions | 1/5/2011 – 1/19/2011 |
| Review Market Scan | 1/12/2011 |
| RFP Bid Package 2nd Draft | 1/31/2011 |
| RFP Package Ready for Issuance | 2/7/2011 |
| Issue RFP (estimated) | 2/14/2011 |

# Interviews / Site Visits

| Date | Group | Status |
|---|---|---|
| 8/31/2010 | Initial SDDPC Meeting– Dave Taylor and Laura Atkinson | Completed |
| 9/14/2010 | Public Utilities Site Visit / IT | Completed |
| 9/15/2010 | Environmental Services Site Visit / IT | Completed |
| 9/16/2010 | SD Police Department / IT | Completed |
| 9/16/2010 | Fire Communication Center / IT | Completed |
| 9/21/2010 | SDDPC Asset Inventory Review | Completed |
| 9/22/2010 | Public Utilities Management Meeting | Completed |
| 9/23/2010 | Attorney's Office Management Meeting | Completed |
| 9/27/2010 | Fire Department Management Meeting | Completed |
| 9/29/2010 | Finance Group Management Meeting | Completed |
| 9/30/2010 | Application Portfolio Review | Completed |
| 10/1/2010 | SCCPC Data Center Site Visit | Completed |
| 10/4/2010 | Police Department Management Meeting | Completed |
| 10/5/2010 | General Services Management Meeting | Completed |
| 10/5/2010 | Library Department Management Meeting | Completed |
| 10/6/2010 | Personnel Department Management Meeting | Completed |
| 10/6/2010 | HR Related Functions & Risk Management Meeting | Completed |
| 10/7/2010 | ESD Management Meeting | Completed |
| 10/8/2010 | Engineering and Capital Projects Management Meeting | Completed |
| 10/18/2010 | Development Services Management Meeting | Completed |

# Information and Data Gathering

- **Data Gathering**
- **Baseline Data**

# Introduction and Context

## Sourcing Strategy Development Steps


### Gather Information & Data

- The purpose of the Information and Data Gathering activity is to:
  - Determine City stakeholders' key IT requirements, business drivers, and their points of view on the current and potential future IT sourcing models through an in-person interview and written questionnaire process
  - Understand each stakeholder's IT and business environment through the collection of financial and technology-associated data
  - Develop an understanding of the current financial and IT environments within each stakeholder group
- The results of the Information and Data Gathering step is used as input to subsequent strategy development steps where key sourcing drivers are identified and specific IT sourcing alternatives are evaluated against key findings

# Project Background

## Current City Environment

- The City currently receives most of its IT services through the San Diego Data Processing Corporation ("SDDPC" or "DPC"), which is a non-profit corporation formed in 1979 with the explicit purpose of providing IT services to the City
- The sole Member of the SDDPC is the City of San Diego. In its capacity as sole Member, the City acts through the Mayor and the City Council
- From 1979 until 2009, the SDDPC provided the City with most of its IT infrastructure and support services
- In 2009, the help desk and computer support services were put out to bid, resulting in a managed services contract with En Pointe Technologies in April 2010
- Approximately 88% of the SDDPC's current revenues come from the City. The other approximately 12% are derived from other local government clients (e.g., ARJIS, SDCERS)
- The City continues to rely heavily on the SDDPC for most of its IT infrastructure and applications development and support needs

## Avasant's Involvement with the City

- The City engaged Avasant to conduct a comprehensive analysis of the City's IT environment and develop a recommended sourcing strategy for the City's future IT direction relative to the scope of services that the SDDPC and other 3rd Parties are currently providing the City
- The stated drivers related to the City's RFP and subsequent retention of Avasant were cost reduction, addressing obsolete equipment, and moving to Industry Standards where cost neutral
- Based on sourcing strategy findings and resulting recommended strategy, the City will decide how to proceed

# Stakeholders Interviewed

## Avasant interviewed business and IT representatives from the following City Departments:

- City Attorney
- Development Services
- Engineering and Capital Projects
- Environmental Services
- Finance
- Fire-Rescue
- General Services
- Human Resources
- Information Technology
- Library
- Personnel
- Police
- Public Utilities
- Risk Management

## Avasant also interviewed the following individuals from the SDDPC:

- Larry Morgan
- David Taylor
- Laura Atkinson

# Interview Results Summary

**The following are key takeaways obtained through the interviews of City IT stakeholders:**

- Because the SDDPC has been providing many of these services to departments for quite some time, most departments rely on the SDDPC's familiarity with departments' IT and business environments and their ability to provide them with IT services in an efficient and knowledgeable manner
- Flexibility when it comes to service requests is important
- Areas of focus are controlling costs, accurate invoicing, third party support, project management skills, strategic focus, effective communication, change order costs, and technical expertise
- Risks associated with a potential transition of services to a new provider include: loss of knowledge and key personnel, understanding departments' business and IT drivers, service continuity, understanding departments' unique and often heavily customized applications/systems, service responsiveness, loss of control, and loss of data (including historical data)

# Quantitative Data Gathering – IT Resources

**In addition to the qualitative data Avasant gathered through interviews and completed Department questionnaires, Avasant also gathered quantitative data related to the City's IT environments:**

**One of the main goals of the quantitative data gathering during the Sourcing Strategy phase is to derive a quantity of Resource Units for the in scope services.**

- **What are Resource Units?**
  - Resource Units (or "RUs") are units of measures related to various IT service areas
  - Resource Unit Examples
    - For Data Center – Mainframes, servers (by type/size), storage (per GB or TB), email mailboxes (accounts), database instances
    - For Network – Routers, switches, firewalls, circuits
    - For Voice – Circuits, handsets
- **What are Resource Units Used For?**
  - RUs are used to estimate what the City might reasonably expect to pay for services associated with the RUs under the different sourcing scenarios that are modeled for potential sourcing strategy consideration
  - RUs form the principal basis by which managed IT service providers develop pricing for customers
  - Avasant maintains a database of historical RU costs from service providers in the marketplace, based on actual deals it has been involved in over the last 12 months and beyond

# City IT Costs and Services

## City Information Technology Costs and Services

- The Financial Analysis Model analyzes the current City IT Costs to develop a **Base Case**. Costs include:

| | Direct SDDPC (FY 2011 Budget) | | | | SDDPC Pass Through (FY 2011 Budget) | | | | SDDPC Subtotal |
|---|---|---|---|---|---|---|---|---|---|
| | Data Center | Network | Applications | Other | Data Center | Network | Applications | Other | |
| Services Total | $ 4,236,274 | $ 8,390,562 | $ 15,540,607 | | $ 8,554 | | $ 4,553,387 | | $ 32,729,384 |
| Software Total | $ 2,625,813 | $ 904,818 | $ 320,425 | | $ - | | $ 154 | | $ 3,851,210 |
| Hardware Total | $ 1,986,571 | $ 2,904,107 | | | $ - | | $ 850 | | $ 4,891,528 |
| Other** | | | | $ 284,693 | | | | $ 11,880,724 | $ 12,165,417 |
| Subtotal | $ 8,848,658 | $ 12,199,487 | $ 15,861,032 | $ 284,693 | $ 8,554 | $ - | $ 4,554,391 | $ 11,880,724 | |
| Total | $ 37,193,870 | | | | $ 16,443,669 | | | | $ 53,637,539 |

** Other: Desktop Hardware and Software for SDDPC. NPE For City of SD

- $6,089,404 of the $6,369,130 for OneSD is debt service for the original CIP project

* Footnote - Public Utilities/Water CIP Project - SAP Customer Care System (CCS) = $10.8M

| | City of SD: Department of IT (2011) | City OneSD Support Dept (FY2011) | City Direct Purchase (FY2011) | City of SD: Departments (2011) / Pers Exp | City Subtotal | City and SDDPC Total |
|---|---|---|---|---|---|---|
| Services Total | $ 2,071,435 | $ 2,524,165 | $ 4,722,520 | $ 9,631,996 | $ 18,950,116 | $ 51,679,500 |
| Software Total | | | $ 2,108,152 | | $ 2,108,152 | $ 5,959,362 |
| Hardware Total | | | $ - | | $ - | $ 4,891,528 |
| Other** | $ 909,294 | $ 6,369,130 | $ - | | $ 7,278,424 | $ 19,443,841 |
| Subtotal | $ 2,980,729 | $ 8,893,295 | $ 6,830,672 | $ 9,631,996 | | |
| Total | $ 2,980,729 | $ 8,893,295 | $ 6,830,672 | $ 9,631,996 | $ 28,336,692 | $ 81,974,231 |
| | | | Public Utilities/Water CIP Project (SAP Customer System)* | | | $ 10,800,000 |
| | | | | | | $ 92,774,231 |

- Budgeted FTEs

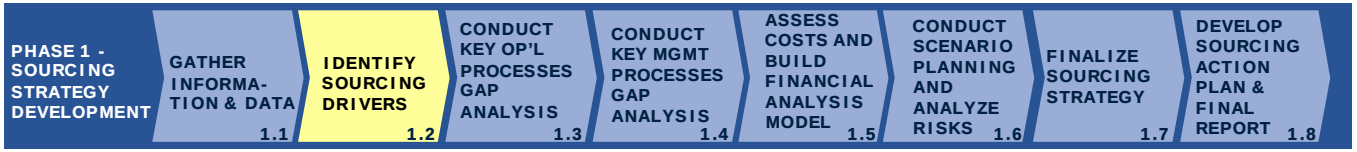
| | Data Center FTEs | Applications FTEs | Network - Voice FTEs | Network - Data FTEs | Mgmt / Arch / Admin FTEs* | Total FTEs |
|---|---|---|---|---|---|---|
| SDDPC | 27.7 | 135.8 | 3.6 | 22 | | 189 |
| 3rd Party Contractors | | | NEC | | | |
| City of SD: Department of IT | | 4 | | | 13 | 17 |
| City of SD: OneSD | | 19 | | | | 19 |
| City of SD: Other Departments | 5 | 8 | | | 80 | 93 |
| | | | | | | |
| | 33 | 167 | 4 | 22 | 93 | 318 |

Rev. 11/10/2010

# IT Sourcing Drivers

# Sourcing Drivers

**Sourcing Strategy Development Steps**




## The following sourcing drivers are motivating the City's sourcing strategy:

- **Cost Reduction**
  - If the City is to enjoy the same level of IT services in the future, it will need to find a way to decrease costs and lower its financial risk
- **Addressing Obsolete Equipment / Technology / Technology Refresh**
  - Mainframe environment exists and will need to be migrated
  - Many telephone system components are beyond end of life (posing a technology and business risk) and need replacement
  - Transforming to a converged voice and data network environment would drive cost savings
- **Move to Industry Standards Where Cost Neutral**
  - Level of some contracted services can be improved by typical managed services providers' offerings
    - Data Center Facilities – The DPC facility is not well situated geographically (poses an operational risk being located near a fault line, in a valley, and fairly close to the location where services are delivered), is not as sophisticated as most providers' standard offerings, and is a potential source of revenue if sold or leased
    - Service Levels – While the current City / DPC relationship includes service levels for a number of core service level metrics (e.g., availability, time to resolve), there are a number of industry standard service metrics Avasant recommends, which would enhance the City's level of IT services and lower performance risk
    - Managed Service Approach – Outcome based sourcing that focuses on cost effective management and delivery of required services by a service provider according to contractually enforceable service levels (including fee reductions)
  - Managed services providers bring a wealth of Industry Standards to bear due to economies of scale and a singular focus on managed IT services

# Sourcing Drivers (cont'd)

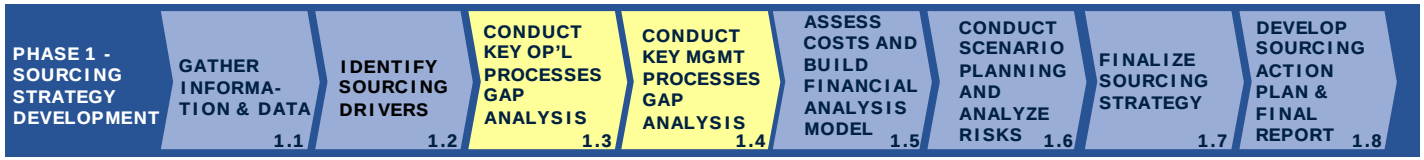
- **Other**
  - Flexibility
    - Providing maximum flexibility to meet changing City demands
    - Providing flexibility to retain key functions and IT activities and to retain business knowledge
  - Security
    - Lowering security risks and ensuring that services meet the City's security requirements and other local, state and federal regulations (e.g., network security, physical/logical security, data security, ISO, HIPAA)
  - Scalability in Human Capital
    - Providing scalable (up or down) and qualified IT resources with a flexible fee structure based on fixed unit rates
    - Ability to utilize a "rate card" for additionally needed services on a temporary / project basis
  - Technical Expertise
    - Ability of the provider to provide resources that have a high level of technical expertise for the in scope services

# Process Analysis and Governance

Rev. 11/10/2010

# Process Analysis

## Sourcing Strategy Development Steps




### Key Operational / Management Processes Gap Analysis

- The purpose of the Operational & Management Processes Gap Analysis activity is to:
  - Operational: Determine what parties (i.e., SDDPC, other third party providers, Department of IT, and City departments) are currently performing typical IT functions and processes associated with the scope of services that are under consideration (i.e., Data Center, Data Network, Voice Network, and Applications Development and Maintenance)
  - Management: Determine what parties are currently performing management practices and cross-functional services (i.e., Competency Centers, Project Management, Service Level Management, Relationship Management, and Governance/Program/Contract Management, etc.)
  - Analyzing how the parties' delivery of each of these functions compares to Industry Standards for managed IT services in today's marketplace
- The results of the operational & management gap analysis steps are used as input to subsequent strategy development steps where specific IT sourcing alternatives were identified and evaluated from financial and risk perspectives

# Operational Processes Responsibility Matrix

**The table which follows indicates what party or parties are currently responsible for performing IT functions/processes associated with Data Center, Data Network, Voice Network and Applications Development and Maintenance.**

- An “X” indicates responsibility for the identified party
- A “Y” indicates responsibility associated with a City department as part of their independent data center operations
- In some instances, further explanation has been provided related to the nature of a party’s responsibility

# Operational Processes Responsibility Matrix

| | Non-City | | City | |
|---|---|---|---|---|
| **Process** | **SDDPC** | **Other Provider(s)** | **Depart. of IT** | **Department(s)** |
| **IT Service Management (ITSM) / Cross Functional Services** | | | | |
| Project Management | X | X | X | X |
| Planning and Analysis | X | | X | X |
| Requirements Definition | | | X | X |
| Design Specifications | X | X | | |
| Acquisition Management | X | X | | • Some Departments (e.g., Public Utilities) manage own acquisition processes |
| Integration and Testing | X | X | | Y |
| Implementation and Migration | X | X | | Y |
| Training and Knowledge Transfer | X | X | | |
| Documentation | X | X | | |
| End User Administration | X | | | |
| Break/Fix and Maintenance | X | X | | • Some Departments (e.g., Police, Public Utilities) provide break/fix or maintenance services |
| Technology Refreshment and Replenishment | X | X | | Y |
| Capacity / Availability Management | X | X (carriers) | | Y |
| Performance Management | X | X (carriers) | | Y |
| Service Level Monitoring and Reporting | X | X (carriers) | | |
| Security | X | | X | |
| Asset Management | X | | | Y |

- **An "X" indicates responsibility for the identified party**
- **A "Y" indicates responsibility associated with a City department as part of their independent data center operations**
- **In some instances, further explanation has been provided related to the nature of a party's responsibility**

# Operational Processes Responsibility Matrix (cont'd)

| | Non-City | | City | |
|---|---|---|---|---|
| **Process** | **SDDPC** | **Other Provider(s)** | **Department of IT** | **Department(s)** |
| **IT Service Management (ITSM) / Cross Functional Services (cont'd)** | | | | |
| Software License Management | X | X | X | • Some Departments (e.g., Police) manage their software licensing |
| Financial / Chargeback / Contract Management | X | | X | |
| Incident and Problem Management | X | X (carriers) | | • Some departments (e.g., Public Utilities) have Incident/Problem Management systems or processes in place |
| Root Cause Analysis | X | X (carriers) | | • Assumption that those departments that conduct Incident/Problem Management also engage in Root Cause Analysis activities |
| Configuration Management | X | | X | |
| Change and Release Management | | | X | Y |

- **An "X" indicates responsibility for the identified party**
- **A "Y" indicates responsibility associated with a City department as part of their independent data center operations**
- **In some instances, further explanation has been provided related to the nature of a party's responsibility**

# Operational Processes Responsibility Matrix (cont'd)

| | Non-City | | City | |
|---|---|---|---|---|
| **Process** | **SDDPC** | **Other Provider(s)** | **Department of IT** | **Department(s)** |
| **Data Center Services** | | | | |
| Server Operations & Administration | X | | | Y |
| Storage & Data Management | X | X | | Y |
| Remote Access | X | | | ? |
| Application Support | X | | | Y |
| Database Administration | X | | | Y |
| Middleware Administration | X | | | ? |
| Messaging | X | | | Y |
| IT Service Continuity and Disaster Recovery | X | X | | Y |
| Web Support | X | | | Y |

- **An "X" indicates responsibility for the identified party**
- **A "Y" indicates responsibility associated with a City department as part of their independent data center operations**
- **In some instances, further explanation has been provided related to the nature of a party's responsibility**

# Operational Processes Responsibility Matrix (cont'd)

| | Non-City | | City | |
|---|---|---|---|---|
| **Process** | **SDDPC** | **Other Provider(s)** | **Department of IT** | **Department(s)** |
| **Data Network Services** | | | | |
| Design and Engineering | X | | | |
| Network Provisioning | X | X (carriers) | | |
| Data Network Operations and Administration | X | | | |
| Network Monitoring and Reporting | X | | | |
| Circuit Support | X | X (carriers) | | |
| Network Documentation | X | X (carriers) | | |
| Firewall Management, DMZ and Internet Infrastructure | X | X (carriers) | | |
| Security Intrusion Prevention and Detection | X | | | |
| Security Penetration | X | | | |
| Security Incident Management | X | | | |
| **Voice Network** | | | | |
| Premise Phone Service | X | X | | X |
| Voice Network Services | X | X (carriers) | | X |
| Voice Messaging Services | X | X (carriers) | | |
| Directory Services | X | X (carriers) | | |
| Voice Conferencing Services | X | X (carriers) | | |
| Contact Center Services | X | X | | • Some departments (e.g., Public Utilities, Treasurer, ESD) have public facing contact centers that they manage |

- **An "X" indicates responsibility for the identified party**
- **A "Y" indicates responsibility associated with a City department as part of their independent data center operations**
- **In some instances, further explanation has been provided related to the nature of a party's responsibility**

# Operational Processes Responsibility Matrix (cont'd)

| | Non-City | | City | |
|---|---|---|---|---|
| **Process** | **SDDPC** | **Other Provider(s)** | **Department of IT** | **Department(s)** |
| **Application Development and Maintenance Services** | | | | |
| Application Development Services | X | X | | • Some departments (e.g., Public Utilities, Police) have staff that do application development |
| Application Warranty Services | ? | | | |
| Application Maintenance Services | X | X | | • Some departments (e.g., Public Utilities, Police) have staff that do application maintenance |
| Service Monitoring, Reporting and Review Services | X (upon City request) | | | |

- **An "X" indicates responsibility for the identified party**
- **A "Y" indicates responsibility associated with a City department as part of their independent data center operations**
- **In some instances, further explanation has been provided related to the nature of a party's responsibility**

# Service Level Gap Analysis – Cross Functional Services

| Service Level Title | Description | Industry Standard | DPC Contractual SLA? | Comment |
|---|---|---|---|---|
| Work Order Response | Proposals in response to customer Work Orders (e.g., installation of new servers due to a new application) | Deliver proposal within 10 business days, 95% of the time | No | |
| System Software Refresh and Updates | Performance of System Software versions or major release modifications and service pack/minor release modifications and patch modifications | Deploy Emergency Maintenance Releases, Non-Emergency Maintenance Releases, Implementation of Enhancement Releases, and Implementation of Major Release Updates within specified timeframes, 98-99% of the time | No | |
| System/Security Administration | Time to provide proposal for security remediation following discovery of a security risk | Deliver proposal within 2 business days, 95% of the time | No | |
| Incident Resolution | Time to notify of and resolve Incidents following responses to different incident priority classifications | Time to resolve Priority 1-4 incidents = 98% (within 3 hours to 5 business days depending on priority level of incident) | Yes, but lower than industry standard | Resolution metrics are mostly 95% within 4-8 hours for P1 incidents, and (90%) within 8-24 hours hours for non-critical |
| Root Cause Analysis | Time to provide initial report of Incident cause | Initial finding within 24 business of Incident Resolution, 98% of the time | No | |
| Backup and Restoration | Frequency and accuracy in backing up and / or restoring service delivery for failed data, applications and component configurations | Restore Requests: ≤ 3 hours – 3 business days from Customer request, 95-99% of the time | No | |
| Asset Tracking and Management | Accuracy of data in asset database (e.g., Serial Number, Location, and Hardware/Software Configuration) | Accuracy level of asset database elements at least 97% | No | |
| Customer Satisfaction | Frequency of customer satisfaction survey and associated performance target | Customers surveyed should be very satisfied or satisfied 90% of the time | No | |

**A Managed Service Provider will be responsible for Fee Reductions for missing an SLA target which fundamentally goes beyond the standard in place with the SDDPC**

# Service Level Gap Analysis – Data Center Services

| Service Level Title | Description | Industry Standard | DPC Contractual SLA? | Comment |
|---|---|---|---|---|
| System Availability | Availability of infrastructure components including servers, external storage, System Software and network connection | Availability of system by system classification = 99.9% - 99.5% | Yes | 99.7% for hosted resources; 99.8%for storage; 99.5% for applications; mainframe 99.8%; 99.5% for databases; 99.0% for IVR systems; 99.5% for iNet; 99.5% for doc. mgmt.; 99.5% for SAP; 99.8% for Altiris; 99.8% for file/print; 99.8% for email |
| Unscheduled Downtime for Each City Application | Unscheduled Downtime for Each City Application | Each application down fewer than 3 time per month | No | |
| Notification of Priority 1, 2 or 3 Outages to City Service Desk | Time to notify City Service Desk of Outages | Notify City Service Desk of Priority 1, 2 and 3 Outages within specified timeframes, 99.9-100% of the time | No | |
| Batch Processing | Completion of Scheduled Production Batch, Demand and Test Batch jobs | Completion of Scheduled Production Batch, Demand and Test Batch jobs within approved timeframe, 95-100% of the time | No | |
| General Administrative Functions | Setup or Modify Job Scheduler Definition and Dependencies; One Time Schedule Change for Existing Scheduled Jobs | Completion of functions within specified timeframes, 98% of the time | Unclear | SLA document indicates service would have to be requested and SLA established by mutual agreement |
| Storage Allocation | Notification to Allocate Additional Storage Resources | Notification to Allocate Additional Storage Resources when capacity reaches 80% of installed capacity, 99% of the time | No | |
| On-demand Disk Storage Capacity Change Requests | Time to deploy Disk Storage Capacity Change Requests | Deploy Disk Storage Capacity Change Requests Increases/decreases of 10% of installed storage capacity within 7 Business Days of City request, 99% of the time | No | |

**A Managed Service Provider will be responsible for Fee Reductions for missing an SLA target which fundamentally goes beyond the standard in place with the SDDPC**

# Service Level Gap Analysis – Data Center Services (cont'd)

| Service Level Title | Description | Industry Standard | DPC Contractual SLA? | Comment |
|---|---|---|---|---|
| Capacity/Performance Trend Analysis and Reporting | Provide monthly and interim analysis and reporting | Timely provision of interim and monthly reports, 99% of the time | No | |
| On Target Web Deployments | Conducting City coded application deployments in QA/production environment | On target City packaged application deployments, 100% of the time | No | |
| Database Instance Creation & Refresh | Response to customer requests to deploy database instances | Creation and refresh of instances within specified timeframes, 95% of the time | No | |
| Database Administration Requests | Response to customer requests to common database administration requests | Deployment within specified timeframes, 95% of the time | No | |
| Database Schema Changes and Stored Procedures | Response to customer requests to for database schema changes and stored procedures | Deployment within specified timeframes, 95% of the time | No | |
| Performance Tuning and Maintenance | Response to ac-hoc customer requests | Response within specified timeframe, 98% of the time | No | |
| Server Acquisition | Time to deliver a requested server | Time to deliver a requested server is within 30 calendar days of authorized request, 95% of the time | No | |
| Virtual Server Provisioning | Time to provision a virtual server | Time to provision a virtual server < 12 hours from Authorized Request to provision, 95% of the time | No | |
| Server Administration | Server admin activities (e.g., provisioning servers and creating an OS, user ID requests, administration requests) | Tasks must be completed within specified timeframes at least 95% of the time | No | |
| IT Continuity and Disaster Recovery (DR) | Time to recover the affected Client Services after a declared DR incident and/or successful DR test | Time to Recover applications based on application recovery rankings,100% of the time | No | |

**A Managed Service Provider will be responsible for Fee Reductions for missing an SLA target which fundamentally goes beyond the standard in place with the SDDPC**

# Service Level Gap Analysis – Data Network Services

| Service Level Title | Description | Industry Standard | DPC Contractual SLA? | Comment |
|---|---|---|---|---|
| Network Availability | The time during which the Network is fully functioning and normal business operations can be carried out with no data loss, downtime, or performance degradation (excludes maintenance window) | 24x7 availability by network type/classification, 99.99% - 99.7% of the time depending on network type/classification | Yes | 99.9% WAN and wireless availability; 99.7% non-backbone WAN; internet 99.99% |
| Network Transit Delay | Round trip transit delay from ingress and egress ports on premise devises | Delay less than 120 milliseconds, at least 99.99% of the time | No | |
| Packet Delivery Ratio | The number of data packets received by the destination network nodes divided by the number of data packets transmitted by the source network node | Successful packet transmission at least 99.95% of the time | No | |
| Jitter | Variation in timing, or time of arrival, of received packets | Time variation less than 10 milliseconds, at least 99.95 % of the time | No | |
| Network Capacity Monitoring | Proactive monitoring and notification to advise the customer of need to increase network capacity | Monitor and respond to customer if sustained avg. daily utilization reaches 60% of circuit provisioned capacity (in and out of in scope components), 98% of the time | No | |
| IMACs (Software and Hardware) | Response time to customer requests for physical and logical installation, move, add and change of network components | Completion of requests within specified timeframes, 95% of the time | No | |
| Implementation of Standard and Emergency Firewall Changes | Response time for changing, adding/deleting firewall rules | Implementation within specified timeframes, 99% of the time | No | |
| NIDS | Continually monitor for current attack signatures; Review all positive Severity Level 1 and Severity Level 2 alerts and notify customer by E-mail | Monitor 24x7, 100% of the time; review and notify customer of all Severity 1 and 2 alerts within 15 minutes, 99.9% of the time | No | |
| Security Vulnerabilities & Penetration Testing | Successful completion of annual network penetration test | Conduct successful annual test of the entire network and reporting of results | No | |

**A Managed Service Provider will be responsible for Fee Reductions for missing an SLA target which fundamentally goes beyond the standard in place with the SDDPC**

# Service Level Gap Analysis – Voice Network Services

| Service Level Title | Description | Industry Standard | DPC Contractual SLA? | Comment |
|---|---|---|---|---|
| Voice Availability | Availability of the voice communications network, including all circuits and all associated hardware (includes blocked calls) | 24x7 availability of the overall voice communications network, 99.99% of the time | Yes | DPC provides "best effort" for voice availability in its direct control, due to the age and condition of some equipment |
| Technology Solution Design | Customer requests for technology solution design for voice services | Response to customer request within 2 weeks, 99.9% of the time | No | |
| Install Access Line | Customer requests to install a new access line | Completion of installation within 45 business days of request, 95% of the time | No | |
| System Hardware Capacity Changes | Customer requests for system hardware capacity changes | Completion of changes within 4 hours of request, 99% of the time | No | |
| User Account Changes | Customer requests for user account changes | Completion of changes within 4 hours of request, 99% of the time | No | |
| IMACs | Customer requests for IMACS | Completion of changes within 2 business days of request, 99% of the time | No | |

**A Managed Service Provider will be responsible for Fee Reductions for missing an SLA target which fundamentally goes beyond the standard in place with the SDDPC**

# Service Level Gap Analysis – Application Development and Maintenance Services

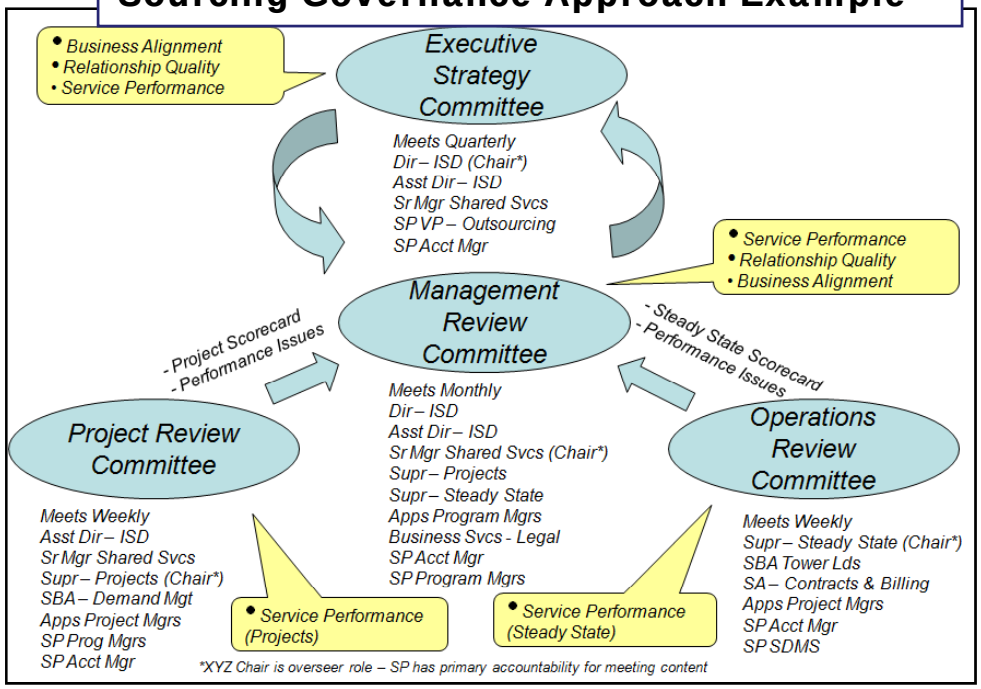
| Service Level Title | Description | Industry Standard | DPC Contractual SLA? | Comment |
|---|---|---|---|---|
| **Application Development** | | | | |
| Project Estimation Methods and Tools Used for Cost and Schedule | Provider must use project estimation methods and tools used for cost and schedule | Provider must use project estimation methods and tools used for cost and schedule 100% of the time | No | |
| Project Estimation (actual cost vs. estimated cost) | Accuracy of Provider's estimated to actual project costs | Actual cost must not be more than +/- 10% of estimate | No | |
| Service Requests | Delivery of proposals for application development projects | Deliver proposal within 3 business days, 95% of the time | No | |
| Milestone Completion – Milestones on the Critical Path | Completion of milestones on the critical path | Completion of milestones by scheduled completion date, 100% of the time | No | |
| Milestone Completion – All Milestones NOT on Critical Path | Completion of project milestones not on the critical path | Completion of milestones by scheduled completion date, 100% of the time | No | |
| Functional Requirements Met | Scale-based Opinion Survey to determine of functional requirements have been met by the provider | Must score 4.5 or higher on a 5.0 point scale, 95% of the time | No | |
| **Application Maintenance/Enhancements** | | | | |
| Service Requests – Minor Enhancements | Reply to customer service request for minor enhancements | Delivery enhancement proposal within 5 days, 95% of the time | No | |
| Service Request Milestone Completion | Completion of established milestones on time per schedule | Completion of milestones by scheduled completion date, 100% of the time | No | |
| Service Requests Performance | Performance against estimated project hours | Actual within 10% of estimate or 15 hours over estimate, whichever is larger, 95% of the time | No | |
| Availability of Qualified Staff | Provider to have qualified staff for project | As defined by the client, 100% of the time | No | |
| Quality | Quality of service, as defined by number reworks | Less, than 1 rework instance per 20 changes into production, 99% of the time | No | |
| SEI/CMM Level | Target SEI/CMM level for services | Level 2 Compliant with Level 3 Characteristics, 100% of the time | No | |

**A Managed Service Provider will be responsible for Fee Reductions for missing an SLA target which fundamentally goes beyond the standard in place with the SDDPC**

# Managed IT Sourcing Governance Approach

- **Four Levels:**
  - **Executive:** Executive Strategy Committee (ESC)
    - Quarterly Meetings
    - Primary focus on *Alignment & Relationship*
  - **Management – City/Provider(s) Agreement(s):** Management Review Committee (MRC)
    - Monthly Meetings
    - Primary focus on *Performance*
  - **Management – Projects:** Project Review Committee (PRC)
    - Weekly Meetings
    - Primary focus on *Projects Status and Performance*
  - **Operational – Steady State:** Operations Review Committee (ORC)
    - Weekly Meetings
    - Focus on *short term, steady state operations*
- **Supplemented by Day-to-Day Joint Operations Teaming**
  - City Tower Leads & Provider(s) Service Delivery Mangers positional authority
  - City and Provider(s) program/project managers day–to–day project collaboration
- **Linked Through Overlapping Membership**
  - No attendance substitutes
- **Formal Standing Agendas**
- **Formal Meeting Minutes Published**

**Sourcing Governance Approach Example**



# Governance Functional Roles

**During Phase 2 and Phase 3 of the City of San Diego Sourcing Initiative, Avasant recommends the City evaluate their governance mechanisms and that the following sourcing governance roles be put in place during transition to manage the Service Provider(s):**

- Sourcing Program Manager / Provider Relationship Manager (typically 1-2 FTEs)
- Client Relationship Manager (multiple FTEs)
- Performance Manager (multiple FTEs)
- Architectural Manager (multiple FTEs)
- Delivery Demand Manager (typically one FTE)
- Contract Manager (typically less than or equal to one FTE)
- Finance Manager (typically less than or equal to one FTE)
- Compliance & Risk Manager (typically less than or equal to one FTE)
- Transition, Migration, and Transformation Manager (multiple FTEs – some temporary)

**Note that number of people in the various roles, and the ability of one person to fulfill 2 different roles is dependent on the size and complexity of the sourced environment and the underlying client organization. In the case of the City:**

- Based on the fact that we have Data Center, ADM, and Network in scope, we will need multiple people in the Performance Manager and Architectural Manager roles. Many of these roles may already be filled
- Having a permanent contract manager and permanent finance manager will be very important. Often a client will use resources that are brought in late in the process. This is a common point of failure since it is crucial that these 2 roles play an active function that is extremely familiar with all aspect / documents of the sourcing agreement

# Timing of Governance Roles

**When a given governance role needs to be put in place depends on the lifecycle of the Sourcing Transaction**

- **Some roles need to be put in place so they own the solution, which means that they need to be part of the provider selection and/or negotiations**
  - Sourcing Program Manager: This person needs to understand and be part of all elements of the transaction (e.g., provider selection, financial terms, contractual terms)
  - Transition & Optimization Manager: The providers will propose a timeline that this person must believe is achievable. The final negotiated transition plan (services transition, migration, and transformation) should be thoroughly reviewed by this role and changed where appropriate
  - Contract Manager: Similar to the Transition and Optimization Manager, the person in this role must understand the contract inside and out, including: SLAs, fee reductions, in scope services / SOWs, MSA, etc.
  - Finance Manager: Same as above. The fee sheets, fee reductions, resource units, fee reductions, etc., must be thoroughly understood
- **Other roles can be put in place as the Agreement is signed (or about to be signed). It is Avasant's position that all important governance roles should be in place by the time the provider starts transition**
  - This is important since the provider's operational procedures will be developed based on the input from the Client governance organizations
  - Further, Avasant finds that most sourcing transactions have issues because the proper processes were not put in place during transition and the 6-9 months of the Sourcing Agreement. Setting up the right processes and procedures will enable success over the life of the program

# City-Retained Functions

**What functions should be considered for external sourcing?**

**Always Retain**

***Demand Functions***

- Executive and business unit relationship management
- Architecture and Technology Planning
- Security Management
- Program Management
- Requirements definition / Demand Management

**External Sourcing Candidates**

***Supply Functions***

- Delivery of Ongoing Services
- Operations, including Network and Security Operations Centers
- Monitoring of all Operations
- Technical Support and Problem Resolution
- Capacity Management
- Delivery of Projects
- Architecture and Technology Design
- Reporting

**Key Conclusion: Demand functions are too important to the enterprise to turn over to outside management – they should be retained. Supply functions can be considered for external managed sourcing.**

# Security Functions

**How should management of security functions be split?**

**Always Retain**

***Demand Functions***

- Establishment of policies, standards and procedures
- Developing and maintaining Security Architecture
- Performing Security Audits
- Approving all security operational functions provided by the Data Center Service Provider

**External Sourcing Candidates**

***Supply Functions***

- 24x7 Security Operations Center (SOC)
- Monitoring of system security configurations
- Security patch implementation (approved by client)
- Anti-virus management and updates
- Network Intrusion Detection/Prevention

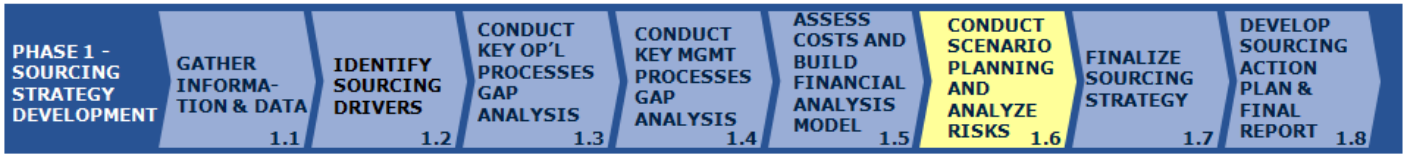
**Key Conclusion: Industry trends and best practices call for the client to retain security management functions and the provider to perform security operational activities as a part of the Data Center or Telecom service areas.**

# Key SDDPC Personnel

- **Approximately 28-35 SDDPC Resources have been identified as Key/Critical Personnel, with lengthy and deep knowledge of the City of San Diego's department business processes and systems**
  - Several City Departments identified losing these dedicated and/or embedded personnel as a substantial risk to their business
- **Service Providers often take on Client or other Key Personnel in similar situations**
  - Often a provider will independently request key personnel be transferred to ensure they can deliver services during the initial phases of the program
- **To ensure continuity of service, the City of San Diego should consider requiring the Service Provider to take on the Critical Personnel that will be identified in the RFP**

# Sourcing Scenarios

## Sourcing Strategy Development Steps




## Scenario Planning and Risk Analysis

- The purpose of the Scenario Planning and Risk Analysis activity is to evaluate potential IT services sourcing models for the delivery of City IT services
- Each potential model represents a scenario that is evaluated according to its risk profile
- The results combined with scenario cost related analysis will contribute to the development of a recommended future City IT sourcing approach in subsequent strategy development steps

# Services Targeted for RFP

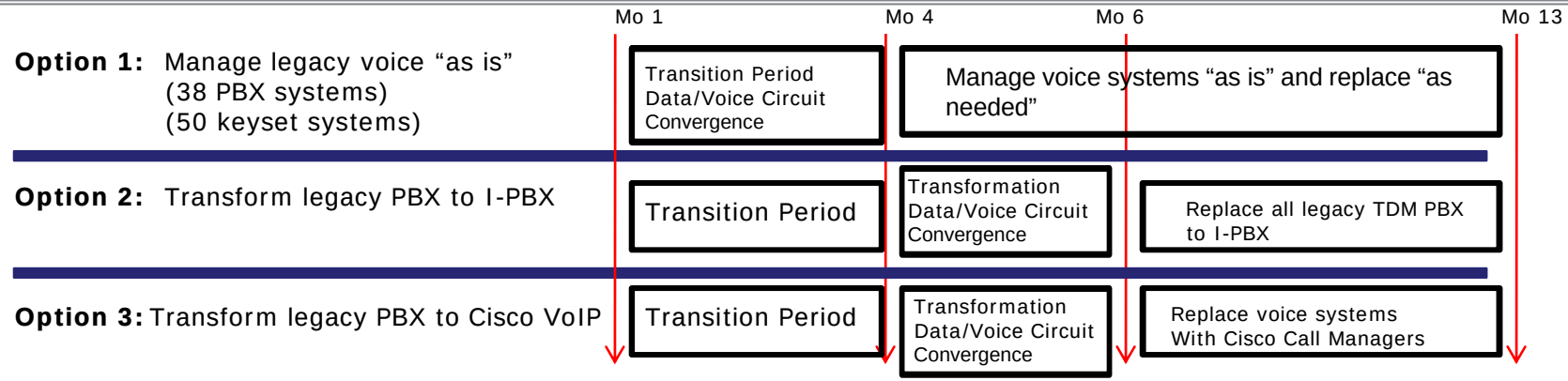
- **Services Performed by SDDPC for the City**
  - Cross Functional IT Service Management and Lifecycle Services provided by the SDDPC
  - Data Center Services
    - Services included: Data Center Operations and Administration, Storage and Data Management. Applications Support, Database and Middleware Administration, Messaging (e-mail), IT Service Continuity and Disaster Recovery
  - Network Services
    - Data Network
      - Services included: Design and Engineering Support, Provisioning, Operations and Administration. Monitoring and Reporting, Data Circuit Support, Network Security Management
    - Voice Network
      - Services included: Premise Phone Services, Provisioning and Engineering Support, Operations and Administration, Network Monitoring and Reporting, Voice Circuit Support, Voice Messaging
  - Application Development and Maintenance
    - Services included: Application Development Lifecycle / Projects & Major Enhancements, Application Warranty Services, Application Maintenance and Enhancements, Managed Time and Materials
- **Infrastructure, Network, and Application Services supported by non-SDDPC personnel should be priced as an option within the RFP**
  - Department Data Center / Server Rooms
  - ERP Technical Support
  - Help Desk / Deskside Support

# Current Base Cost Summary – Network Costs

| BASE CASE (AS IS) | Network Base Cost | | | |
|---|---|---|---|---|
| | SW | HW | Service | Total |
| **Voice Network** | | | | |
| 5-digit dialing usage, monthly voice/data 1MB line, NEC costs | $ - | $ - | $ 1,884,140 | $ 1,884,140 |
| Voice Network | $ 24,507 | $ 539,147 | $ 1,887,015 | $ 2,450,669 |
| **Voice Network Total** | **$ 24,507** | **$ 539,147** | **$ 3,771,155** | **$ 4,334,809** |
| **Data Network** | | | | |
| Blackberry License | $ 90,593 | $ - | $ - | $ 90,593 |
| Network Access (VPN, Dept Dedicated ckt) | $ 428,712 | $ - | $ - | $ 428,712 |
| SANNET | $ 361,006 | $ 2,364,960 | $ 4,619,407 | $ 7,345,373 |
| **Data Network Total** | **$ 880,311** | **$ 2,364,960** | **$ 4,619,407** | **$ 7,864,678** |
| **Total Network** | **$ 904,818** | **$ 2,904,107** | **$ 8,390,562** | **$ 12,199,487** |

- Voice Network Costs breakdown:
  - $ 1,237,218 of $ 1,884,140 – usage cost, voice/data line annual cost
    $ 646,922 of $ 1,884,140 – RMC labor, NEC labor, and other parts costs
  - $ 1,621,483 of $ 1,887,015 – voice carrier circuit cost
    $ 265,532 of $ 1,887,015 – SDDPC labor cost
  - Other Voice Costs: $ 310,356 of $ 539,147 – voice maintenance cost and $ 228,791 – HW depreciation
- Data Network Costs breakdown:
  - $ 2,424,405 of $ 4,619,407 – SDDPC labor cost
  - $ 2,195,002 of $ 4,619,407 – data carrier circuit cost
  - $ 805,244 of $ 2,364,960 – hardware maintenance cost
  - $ 1,559,716 of $ 2,364,960 – projects and hardware asset capitalized depreciation cost

# Voice Network Options




**Option 1 – Manage & maintain legacy PBX "as is"**

- Continuing to operate an end-of-life voice system poses many risks to the City of San Diego
  - Replacement parts are not available, out-of-date software is not supported, support calls are billed at T&M (expensive) labor rates, and there is a limited ability to expand City's existing voice system with feature functionality

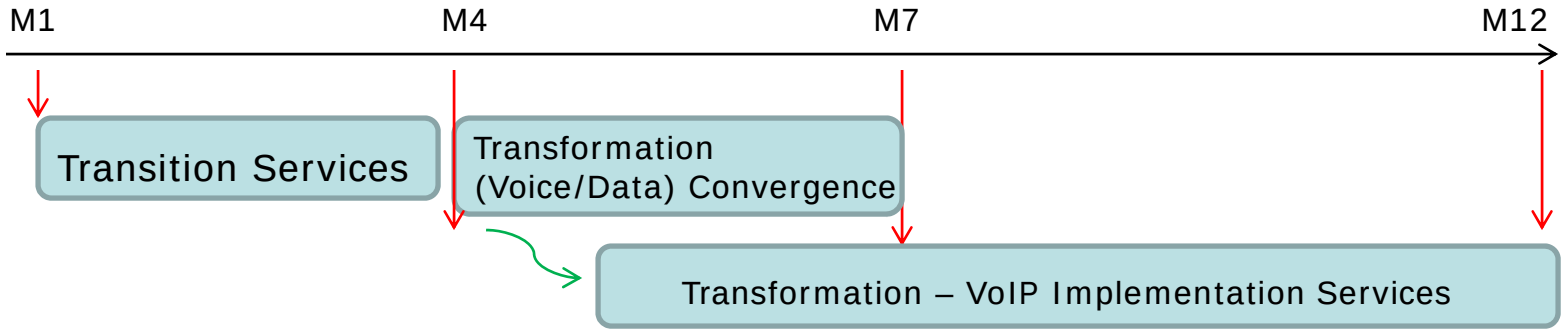
**Option 2 – Transform legacy PBX to I-PBX**

- Replacing all PBX to I-PBX systems does not leverage current investments in Cisco router upgrades – IP routers
  - Need to replace all 38 PBX systems currently in place which could cost over $3M annually (provider owned and leased service)
  - New I-PBX can be proactively managed remotely reducing the need for on-site staffs as well as elimination of T&M labor rates
  - Solution still requires data and voice management and engineering staffs to manage Data and Voice systems
  - Transformation can begin (using a phased approach) following voice/data circuit convergence – critical sites first

**Option 3 – Transform legacy PBX to Cisco VoIP solution**

- Within the 1st year, transform legacy voice systems to Cisco VoIP solution with Call Managers and SIP (soft) Phones
  - Leverages the current investments in Cisco routers, and the data network staff can manage these devices, thus, increased efficiencies
  - Requires investments in Cisco Call Managers and QoS/CoS management modules ( over $600k+) to support current 38 sites where PBX resides as well as 50 locations where legacy key sets reside
  - Eliminates the need for traditional TDM voice environment including voice circuits and TDM PBX/Keysets
  - Assumes that current Cisco routers are being refreshed on a regular basis – with IP routers (may incur additional costs)
  - Transformation can begin (using a phased approach) following voice/data circuit convergence

# Option 3 – VoIP Transformation Timeline




- **Provider will be able to provide a utility based pricing model including VoIP (Cisco Call Manager, IP Routers, Voicemail) services and leverage its data network staffs to manage all network equipment for increased efficiencies**
- **Above timelines are aggressive based on current City of San Diego voice system reliability and availability needs**
  - Past outages impact
  - Most recent outage impact (Water Department voice system outage)
  - The City of San Diego will need to transfer the "ownership" of the data network assets from SDDPC to the City or replace using provider provided data network equipment (owned by the provider and leased back to City)
- **Transition in Month 1 to Month 3**
  - New provider (Services Transition)
- **Transformation for Circuit convergence (Month 4 – Month 6)**
  - Voice/Data circuit convergence
  - Eliminates duplicate voice/data circuits by implementing MPLS services
  - VoIP implementation planning can be performed during the initial voice/data network convergence transformation
- **Transformation for VoIP services (Month 5 – Month 12)**
  - VoIP transformation including deployment of Cisco Call Managers, Voicemail, Soft IP Phones
  - Begin site assessment/design during transition services and as voice/data convergence completes by site, begin deploying VoIP systems

# Business Case - legacy Voice vs. VoIP

- **The Base Case and Renegotiate with DPC assumes that legacy PBX (voice systems) will continue to degrade 15% year over year due to age of the PBX/Keyset equipment – applying FY11 financial data**
  - Voice/data circuit convergence was analyzed in the financial model (6 months transformation of circuit convergence)
  - Voice Maintenance (including any emergency services) and HW Parts costs will increase year over year (out of warranty and T&M services) – 15% year over year
  - As certain parts may not be readily available, the City of San Diego will need to upgrade legacy voice system based on site / user criticality and age of the system – assuming $250k each year and depreciated over 7 year term
  - Data Network fees include annual HW depreciation of $1,559,716 (data asset refresh projects, asset lease)
  - Current SDDPC voice support costs are kept constant at current cost
- **In the Managed Service Provider scenario we assumed VoIP solution including voice/data circuit convergence**
  - Voice/data circuit convergence was analyzed in the financial model following 3 months of Transition services (3 months transformation of circuit convergence); also included VoIP asset deployment in 2nd half of 1st year
  - Provider will be able to provide a utility based pricing, model including VoIP (Cisco Call Manager, IP Routers/Switches, Voicemail) services, leveraging its data network staffs to manage all network equipment for increased efficiencies
  - Leverages provider's significant investments in IT, automation tools, enterprise level solutions, and provider owned assets
  - Transformation costs of over $500,000 was estimated (Call Manager implementation, cable/wiring upgrades, etc.)
  - Applied $150/unit for "soft" IP Phones (owned by City of San Diego and depreciated over 7 year term)

# Service Delivery Model

- **Onshore / Offshore – Service Delivery Locations**
  - Service Providers can deliver services to their clients using many different combinations of service delivery locations
  - Clients often require the Service Providers to design their delivery solutions using client's business and IT requirements
    - Overall cost considerations (highest $$$ – onsite; lowest $ – offshore)
      - For the size of the City of San Diego environment, the City will save approximately $250,000 - $500,000/year for utilizing 10% offshore resources
    - Service level requirements / Business requirements / End user experience requirements
- **Service Providers should provide a solution and price for a fully Onshore option if they are proposing to use Offshore resources in their primary response**

# Contract Term & Termination

## - Length of Contract Term

- **Relatively shorter contract terms (< 5 year mandatory term)**
  - Pros
    - Increases the City's flexibility to move to a new a new provider if things aren't working well
  - Cons
    - Steady state operations will be on the relatively shorter side, as transition activities (e.g., transition, migration, and transformation) can take up to 18 months to complete
    - Costs the City will be higher, as the provider will not be able to optimize their services
- **Relatively longer contract terms ( 5+ year mandatory term)**
  - Pros
    - Encourages the provider to be more of a true "partner" with the City (they're in it for the long haul)
    - Allows the City to enjoy a relatively longer period of steady state services from the provider
    - Lower overall and yearly costs
  - Cons
    - Locks the City into a longer term with a provider that might not be working well for them
    - The City would have to terminate for convenience if they wanted to get out of the contract before end of term

# IT Sourcing Scenario Summaries

Based on stakeholder interviews and initial data collection activities, the sourcing strategy development team evaluated the following IT sourcing models as part of the IT sourcing strategy initiative:

1. **As Is – Base Case** – Renew the DPC contract with the same model and cost structure, and same general terms and conditions.
2. **Renegotiating Exclusively with the current service provider (SDDPC) for an Improved Model and Cost Structure** – Continuation of the current model where the SDDPC provides services, however with contractual improvements made to better align the future services and pricing with industry standards for standard managed services agreements of a similar size and scope. This Scenario includes voice/data circuit convergence in Year 1 as part of SDDPC's service improvement project.
3. **Insourced** – The City would replace current DPC contracted services with City employees; the City would attempt to "rebadge" current DPC employees. Current department City IT staff and direct contractors would remain in place. If selected as the future IT sourcing approach the City would conduct a human resources hiring process to fill vacated DPC positions.
4. **Managed IT Services** - Managed IT services provided by an external IT service provider for all in scope services, based on contractual statements of work and service level agreements.

# IT Sourcing Scenario Summaries

| Key Character-istics | As Is – Base Case: Renew the DPC Contract with the Same Terms and Conditions | Renegotiate with Current Service Provider for Improved Model and Cost Structure | Insourced | Managed Services (competitively bid) |
|---|---|---|---|---|
| **Service Delivery Approach** | • Current model – Service provider staff working at DPC and embedded in departments<br>• The provider manages and directs overall service delivery<br>• Data center services out of the current DPC location; all FTEs local/onsite<br>• DPC responsible for data center maintenance and technology | • Current model – Service provider staff working at DPC and embedded in departments<br>• The provider manages and directs overall service delivery<br>• Data center services out of the current DPC location; all FTEs local/onsite<br>• DPC responsible for data center maintenance and technology | • All IT services delivered by City employees<br>• City fully responsible for service delivery<br>• Data center services provided from the current DPC location; all FTEs local/onsite<br>• City responsible for data center maintenance and technology currency | • Service provider delivers managed IT services (e.g., data center, network management) based on SOWs, SLAs and fixed unit pricing<br>• Data center services delivered out of provider's facilities; mix of onsite and remote support in other service areas<br>• Local hosting of some applications and/or data that can not move out of the City to an appropriate location |
| **Scope of IT Services & Service Delivery Locations** | • Enterprise services (data center, telephony and data network, operations, security)<br>• Select application development and maintenance, project management, database services<br>• Embedded staffing in departments<br>• *All staff onsite* | • Enterprise services (data center, telephony and data network, operations, security)<br>• Select application development and maintenance, project management, database services<br>• Embedded staffing in departments<br>• *All staff onsite* | • Enterprise services (data center, telephony and data network, help desk, security)<br>• Select application development and maintenance, project management, database services<br>• *All staff onsite* | • SOW based services in the following areas:<br>▪ Data Center - *from provider remote facility*<br>▪ *Disaster Recovery – remote site*<br>▪ *Data Network Management - Onsite and remote services*<br>▪ *Voice System Management - Onsite and remote services*<br>▪ *Applications Development/Maintenance - Onsite and remote services*<br>▪ *Cross-Functional Services (e.g., IT lifecycle, service management, security) - Onsite and remote services* |

# IT Sourcing Scenario Summaries

| Key Character-istics | As Is – Base Case: Renew the DPC Contract with the Same Terms and Conditions | Renegotiate with Current Service Provider for Improved Model and Cost Structure | Insourced | Managed Services (competitively bid)<br><br>Single Provider, Provider Data Center |
|---|---|---|---|---|
| **Transition Consider-ations** | • No transition required | • Transition to new contract requirements<br>• No physical migration<br>• Transition period approx. 3 to 4 months<br>• Transformation of voice/data circuit convergence in 1st 6 months | • City to hire staff to replace outgoing DPC staff; will likely want to try to retain key DPC employees<br>• Transition period approx. 6 to 8 months including hiring process<br>• Knowledge transfer not required to the extent that the City rebadges DPC employees | • Physical migration of servers to service provider facilities<br>• Transition to provider's IT management tools, processes and procedures<br>• Transition to new contract requirements<br>• Knowledge transfer required<br>• Total transition period approx. 12 – 24 months (assumes a new service provider)<br>  ▪ Services Transition approx. 3-5 months<br>  ▪ Migration approx. 9-15 months<br>  ▪ Transformation approx. 12-24 months (VoIP transformation by end of year 1) |
| **Cost Elements** | • Ongoing service provider fees<br>• City IT operations management and contract management costs<br>• City (DPC) data center ongoing maintenance costs | • Ongoing service provider fees<br>• City IT operations management and contract management costs<br>• City (DPC) data center ongoing maintenance costs<br>• Reduced voice circuit fees through data circuit convergence | • Fully burdened City staff FTE costs for the replaced DPC employees<br>• HR recruiting, training, knowledge transfer, program management costs<br>• City (DPC) data center ongoing maintenance costs | • Fixed fees for a baseline level of resource units<br>• Asset acquisition, maintenance and refresh costs for voice and data network assets<br>• Transition costs: knowledge transfer, provider tools/processes implementation, and City program management (assumes a new provider)<br>• Transformation costs (one-time)<br>• Contract governance and relationship management staff costs |

# Risk Analysis Objectives and Definitions

The purpose of this Risk Analysis is to assess the level of risk associated with each of the contemplated sourcing scenarios. Each scenario is evaluated in 7 key risk areas that commonly impact IT sourcing decisions. Each risk area is rated on a scale from 1 to 5, with 5 being the highest relative risk rating. A total weighted risk score for each scenario is provided to indicate its total relative risk rating.

The analysis and risk ratings are based on each scenario's key characteristics and aspects of the City's current business and IT environment as determined through stakeholder interviews, data examined in the strategy initiative, and Avasant's experience in the IT sourcing advisory field. Risks were also evaluated relative to the previously identified sourcing drivers that are motivating the City's sourcing initiative. The results of the analysis provides insight into the relative risk level of each scenario and in formulating a suitable sourcing strategy that best addresses the City's objectives, requirements, drivers, competencies and constraints. The following provides definitions of the risk analysis components.

- **Financial Risk** (Cost Reduction) – Risk to the City's ability to predict and control IT costs. Contributing factors include predictability/variability of IT costs, cost savings opportunities (e.g., through economies of scale), labor costs, technology costs, transition costs and governance costs
- **Technology Risk –** Risk that the City will not meet stakeholder technology requirements and maintain technology currency across the City. Contributing factors include technology competency levels related to acquisition, installation and maintenance of the tools, technologies, IT assets and processes
- **Human Capital Risk** (Scalability) – Risk that the City will not achieve its service delivery objectives due to a lack of or misalignment of human capital. Contributing factors include resource availability, flight of human capital, resource scalability/flexibility, qualifications of resources, and labor relations issues
- **Performance / Operational Risk** (Industry Standard Services) – Risk that the City will not achieve its IT related business and service delivery objectives or meet stakeholder requirements. Contributing factors include competency levels, service delivery model benefits and constraints, and the required operational level of effort needed to successfully execute each scenario

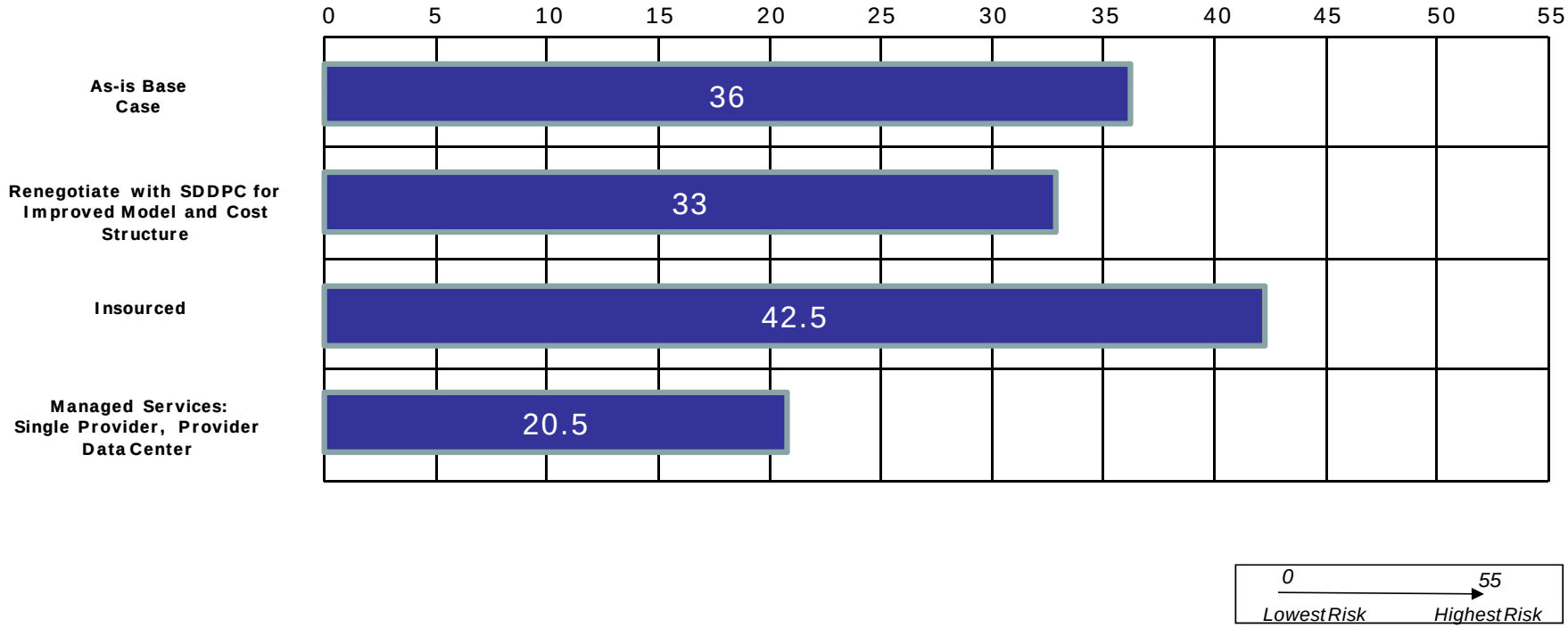
# Risk Analysis Objectives and Definitions (cont'd)

- **Transition Risk** – Risk that transition to the scenario model will disrupt City business. Contributing factors include level of change in the new model, amount of physical migration, knowledge transfer requirements such as the level of documentation required, and policies and procedures development involved with initial implementation
- **Security Risk** – Risk to the City's ability to implement security controls, detect threats and vulnerabilities and prevent breaches. Contributing factors include security competency levels related to the acquisition, installation and maintenance of the security tools, technologies and processes
- **Governance Risk** (Flexibility)– Risk that the City will not effectively govern the relationship between the IT service delivery organization, City management and stakeholders. Contributing factors include level of change, complexity, and available governing mechanisms inherent in the scenario model

# Scenario Risk Scores Comparison Summary: All Risk Areas with Sourcing Drivers-Based Weightings

Using the raw scores for each risk area under each scenario, weights were also applied in order to factor in the Sourcing Drivers previously identified. Weights were assigned as follows: Financial Risk 4x weighting, Technology Risk 2x weighting, all other risk areas 1x weighting.

The chart below shows the comparison among the different scenarios with the above-referenced weighting factors:



# Financial Model

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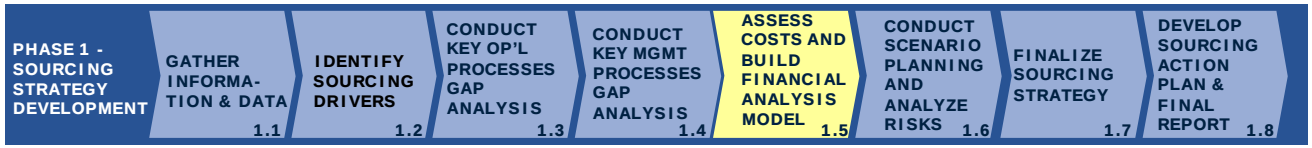
# Financial Model

## Sourcing Strategy Development Steps




- Building the Base Case: We broke the City IT costs into Hardware, Software, and Services
  - Services in the context of the City of San Diego targeted scope typically includes the costs of people, data center facilities, associated software (e.g., middleware), etc.
  - Hardware is sometimes in scope, and other times the Client will choose to retain the assets
  - Software: Application software is not usually included in a Managed Services Sourcing transaction

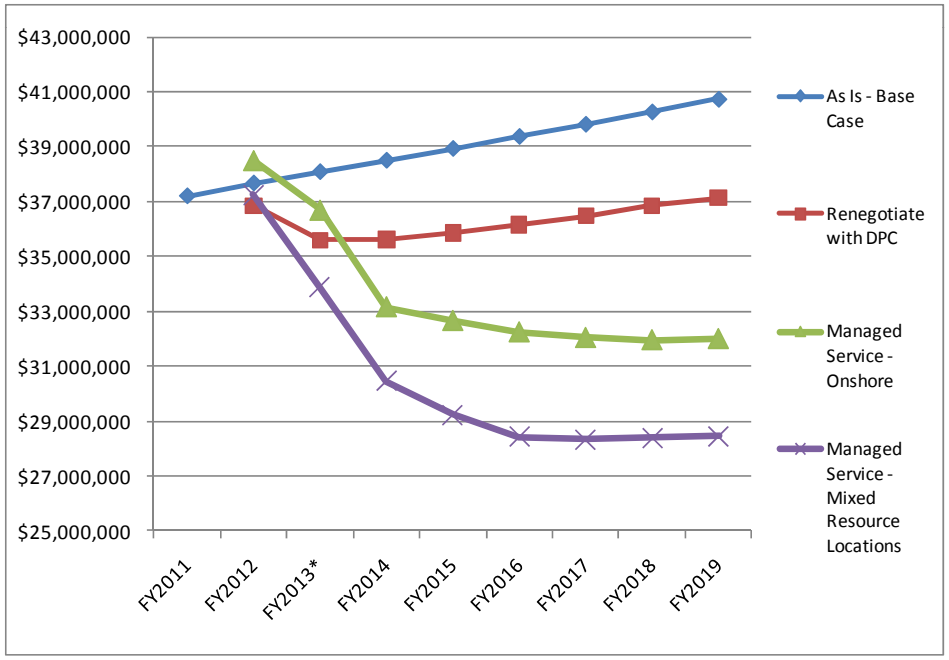
- Financial Impact of Timing
  - Timing of Sourcing Transaction / Rough High Level Timeline
    - Issue RFP: February / March 2011
    - Response Deadline: May 2011
    - Provider Selection: June / July 2011
    - Contract Signature: September 2011 (fiscal year 2012)
    - Services Commencement Date / Cutover: January 2012
  - The Financial Model / Business Case will be impacted by Transition Costs. The Transition Costs typically happen in the first year of the Sourcing Transaction, which depending on how the City plans to account for one-time costs, will impact the business case in Year 1
  - Transition Costs will be different based on the target scenario and ultimate RFP winner
    - **Transition of Services**: Typically takes 3-6 months. Providers will often absorb transition costs if needed
    - **Migration of Facilities / Assets**: Typically takes 6-15 months. Migration costs can be high and are often not absorbed
    - **Transformation of Technology**: Timing and costs are specific to the City IT requirements
  - Transition Costs can potentially be offset against the sale of the DPC Assets

# Financial Model

- The SDDPC Services that are ideally suited for Managed Services Sourcing total $37.2 million in FY2011
- Likely scenarios were financially modeled to determine cost savings options (all scenarios assumed 2% inflation rate)
- The Financial Model for Managed Services has 2 variations, with different Resource Delivery Locations
  - One Time Costs are included

| | Direct SDDPC (FY 2011 Budget) | | | |
|---|---|---|---|---|
| | Data Center | Network | Applications | Other |
| Services Total | $ 4,236,274 | $ 8,390,562 | $ 15,540,607 | |
| Software Total | $ 2,625,813 | $ 904,818 | $ 320,425 | |
| Hardware Total | $ 1,986,571 | $ 2,904,107 | | |
| Other** | | | | $ 284,693 |
| Subtotal | $ 8,848,658 | $ 12,199,487 | $ 15,861,032 | $ 284,693 |
| Total | $ | | | 37,193,870 |

| | As Is - Base Case | Renegotiate with DPC | Managed Service - Onshore | Managed Service - Mixed Resource Locations |
|---|---|---|---|---|
| FY2011 | $37,193,870 | | | |
| FY2012 | $37,666,024 | $36,860,292 | $38,516,294 | $37,252,283 |
| FY2013* | $38,081,737 | $35,599,228 | $36,696,750 | $33,854,985 |
| FY2014 | $38,505,765 | $35,622,123 | $33,160,642 | $30,450,208 |
| FY2015 | $38,938,272 | $35,867,184 | $32,655,640 | $29,232,622 |
| FY2016 | $39,379,430 | $36,151,443 | $32,240,109 | $28,423,411 |
| FY2017 | $39,829,411 | $36,479,609 | $32,032,471 | $28,339,719 |
| FY2018 | $40,286,397 | $36,857,057 | $31,952,362 | $28,386,235 |
| FY2019 | $40,750,528 | $37,143,386 | $31,994,068 | $28,444,840 |
| | **$313,437,564** | **$290,580,320** | **$269,248,336** | **$244,484,304** |




* Assuming Transition Starts in September 2011 (FY2012), the first full year of savings occurs in FY2013

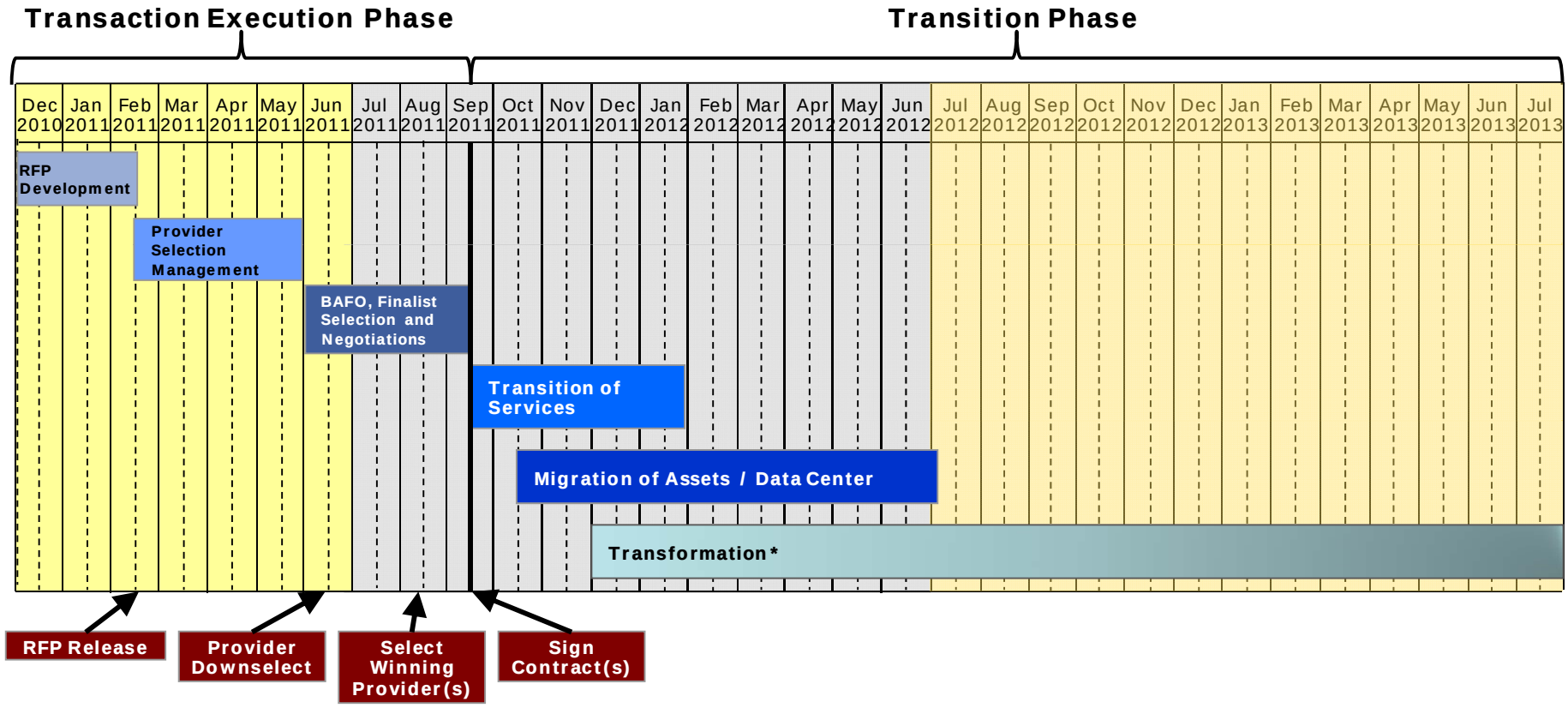
# Conclusion & Sourcing Action Plan

# Conclusions

- **Under the existing relationship between the SDDPC and the City of San Diego, the City retains many of the risks associated with an Insourced IT environment without achieving the benefits of cost reduction and industry standard practices associated with strategic sourcing (managed services)**
  - If the City continues to receive services from the SDDPC, the services should be delivered under a Managed Services model
- **Based on the City's requirements, in scope services, the financial model, and the risk profile, the City of San Diego should move forward with - Managed Services Provider (competitively bid)**
  - A single RFP should be structured in a modular fashion to allow for a Single Provider or Multiple Providers by Service Tower (e.g., Data Center, Network, Applications Development and Maintenance)
  - Service Providers will be required to propose an option where all services will be provided by onshore resources
- **In Scope Service for the RFP**
  - Data Center Services
    - Including Departmental Data Center / Server Rooms
  - Voice and Data Network
  - Applications Development and Maintenance
  - Other Optional Services
    - ERP Technical Support
    - Help Desk / Deskside Support (for consideration after Year 3)

# Transaction and Transition Timeline

## The chart below shows the approximate timing of transaction activities once provider contract(s) have been executed




*** Timing of Transformation is dependent on the criticality of getting off legacy equipment. Transformation planning can occur during Transition with actual Transformation activities occurring immediately after Transition of Services.**



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# Phase 2 & 3 Activities

## Phase 2

- **Develop RFP Documents**
  - Statements of Work (SOWs)
    - ITSM and Lifecycle
    - Data Center
    - Data Network
    - Voice Network
    - Application Development and Maintenance
  - SOW Service Environment Appendices
    - Update / finalize data gathering for in scope resources
  - Service Levels Agreements and associated Fee Reduction Weighting Factors
  - Master Services Agreement
  - Additional key contract documents
    - Relationship Management
    - Fees
    - Fee Reductions
    - Benchmarking
    - Transition, Migration and Transformation Plan
    - Financial and Operational Responsibilities Matrix
  - RFP Instructions and Response template
  - Provider Pricing Response template
- **Develop Weighted provider Scoring Model**
- **Issue RFP**

## Phase 3

- **Manage Provider Selection Process**
  - Engage in Q&A period with providers before RFP responses are due
  - Conduct Bidders' Conference with qualified providers
  - Receive and evaluate provider-submitted proposals
  - Downselect to Best and Final Offer (BAFO) providers
- **Develop Negotiation Strategy and Due Diligence**
  - Develop BAFO package
  - Issue BAFO package to downselected providers
  - Conduct BAFO process meetings with BAFO Providers
  - Conduct parallel MSA/SOW negotiations with BAFO providers
  - Conduct due diligence on provider proposals
  - Receive and evaluate provider-submitted BAFO proposals
  - Select winning provider(s)
- **Negotiate Final Sourcing Agreement**
  - Support provider due diligence on City data
  - Conduct final contract negotiations with winning Provider(s)
  - Sign negotiated contract(s)

# Provider Qualification

**In choosing a Provider(s), the City must strike a balance between ensuring that only those providers that can reasonably perform the requested services are considered, while on the other hand encouraging opportunities for smaller and/or local IT companies to be involved.**

- **Properly constructed Minimum Qualifications to Bid criteria in the RFP Instructions can ensure that only qualified primary contractors are considered. Such criteria could include:**
  - Minimum number contracts of similar size and scope the provider has entering into in the last 5 years
  - Minimum amount of average gross revenue in IT outsourcing services over the last 5 years
  - Certifications that the provider and its officers are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal department or agency
  - Certification that the provider has not within a 3 year period preceding the RFP been convicted of or had a civil judgment rendered against them for commission of fraud or criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property
  - Certification that the provider has not within a 3 year period preceding the RFP had one or more contracts terminated for cause or default
- **The RFP Instructions can also be drafted to include language that encourages larger "prime" providers to consider sub-contracting with smaller, local IT service providers**